

JOINT APPRAISAL ANALYSIS GUIDANCE



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Joint Appraisal Analysis Guidance

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Joint Appraisal Analysis Guidance: a suggested minimum set of data and analyses for use in Joint Appraisals

A key aspect of preparation for the Joint Appraisal is to review relevant data and analyses to understand the progress against grant performance targets and to inform discussions around possible bottlenecks to grant performance (e.g. delayed reporting, unavailable data, key barriers to achieving expected results, etc.), including coverage and equity. This should enable prioritisation of targeted support as part of the Joint Appraisal recommendations.

Wherever possible, data and analyses to inform Joint Appraisal discussions should use already available analyses and reports routinely generated in countries. For example, they should use data and analyses drawn from EPI reviews, annual desk reviews, data already compiled for routine reports such as WHO UNICEF Joint Reporting Form, routine programme monitoring metrics integrated into HMIS/DHIS2/EPI or supply chain dashboards or alternates, equity analyses, coverage evaluation and KAP surveys. Some caution should be exercised for consistently referring to those used data sources when presenting the data. Gavi does not expect data and analyses to be generated solely for the purpose of the Joint Appraisal. However, advance preparation to compile relevant data and analyses may be required.

This annex outlines the suggested minimum set of data and analyses to be made available to inform Joint Appraisal discussions and builds on country examples from previous Joint Appraisals found to be particularly effective (in terms of presentation or level of disaggregation). The minimum set of data and analyses can be supplemented with additional information where deemed relevant by the country.

Illustrated examples

For each area of analysis, illustrative examples of how some of the suggested analyses may be presented/compiled are included. All examples are taken from previous Joint Appraisals. While these do not cover all suggested analyses and the content / presentation could still be further improved in some cases, the intention here is to provide some inspiration from previous Joint Appraisal reports to trigger in-country discussion.

Summary

Area	Suggested Indicators/Analyses
Coverage	DTP3 and MCV 1 Coverage Ranking of lower level coverage districts by DTP3 and MCV1 DTP3 unimmunized infants Additional analyses
Equity	Inequality difference and/or ratio Outbreaks Additional analyses
Surveillance of VPDs	Number of cases (suspected and confirmed) Additional analyses
Health Systems	Number of health facilities providing EPI services Frequency of vaccination sessions provided Number of cold chain equipment Number of health workers Additional analyses
Demand	Drop-out rates (DPT1-DPT3/DPT1-MCV1/MCV1-MCV2) Additional analyses
Data Quality	Completeness of reporting Timeliness of reporting Additional analyses

Suggested Indicators / Analysis

Suggested Analyses

DTP3 and MCV 1 Coverage

Trend analysis for the past 2-3 years (or more) with national and sub-national disaggregation (province, district level). Special attention to districts supported by GAVI HSS funds if relevant. Consider MR campaign coverage if relevant.

Ranking of lower level coverage districts by DTP3 and MCV1

Consider use of maps / heat maps to present data.

DTP3 unimmunized infants

Total estimated number across provinces and districts.

Ranking of districts by DPT1 and DPT3 under/unvaccinated infants

Consider use of maps / heat maps to present data.

Additional analyses

- Coverage across other antigens (whether routine or campaign).
- Full immunisation coverage (as defined by country) should also be considered if data is available.
- Missed opportunities for vaccination. Consider estimation of missed opportunities by comparison of antigens given at the same time (e.g. MCV1 and YF or Penta3, OPV3 and PCV3), especially for new vaccines

Data Sources

Administrative, Official Estimates, WHO-UNICEF estimates, Surveys

Guidance and Resources

Immunization, vaccines and biologicals: data, statistics and graphics, WHO (2016)

http://www.who.int/immunization/monitoring_surveillance/data/en/

Health Equity Monitor: compendium of indicator definitions, WHO (2015)

http://www.who.int/gho/health_equity/outcomes/health_equity_compendium.pdf

WHO vaccine-preventable diseases: monitoring system: 2016 global summary, WHO (2016)

http://apps.who.int/immunization_monitoring/globalsummary/

Global Health Observatory (GHO) data: Health Equity Assessment Toolkit (HEAT), WHO (2016)

http://www.who.int/gho/health_equity/assessment_toolkit/en/

Spatial data repository: the DHS program, USAID/PEPFAR

<http://spatialdata.dhsprogram.com/modeled-surfaces/>

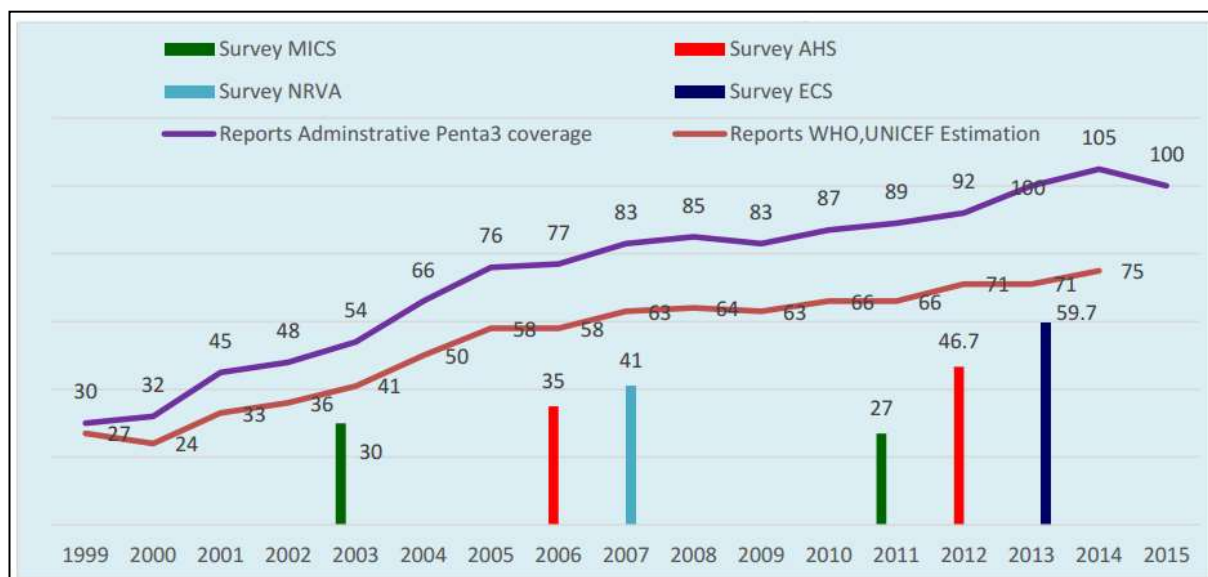
Immunization, vaccines and biologicals: missed opportunities for vaccination strategy, WHO (2017)

http://www.who.int/immunization/programmes_systems/policies_strategies/MOV/en/

Coverage

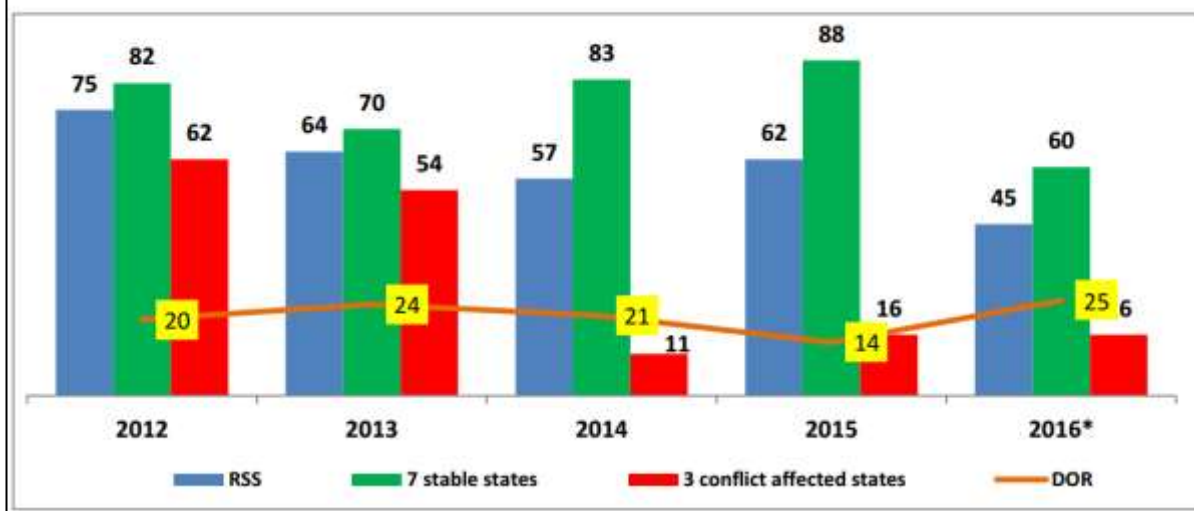
Examples

DTP3 and MCV1 coverage (time trends, across data sources, sub-national disaggregation)



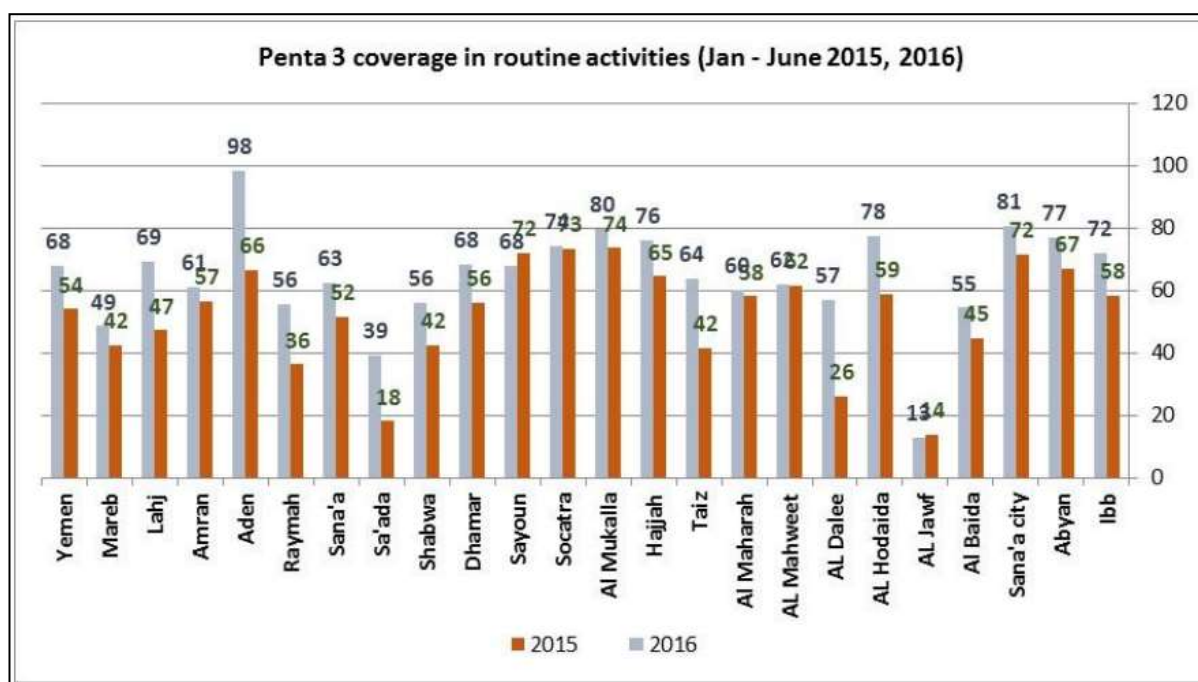
Afghanistan JA 2016

Figure 3: Trend of Routine immunization coverage in South Sudan 2012-2016*



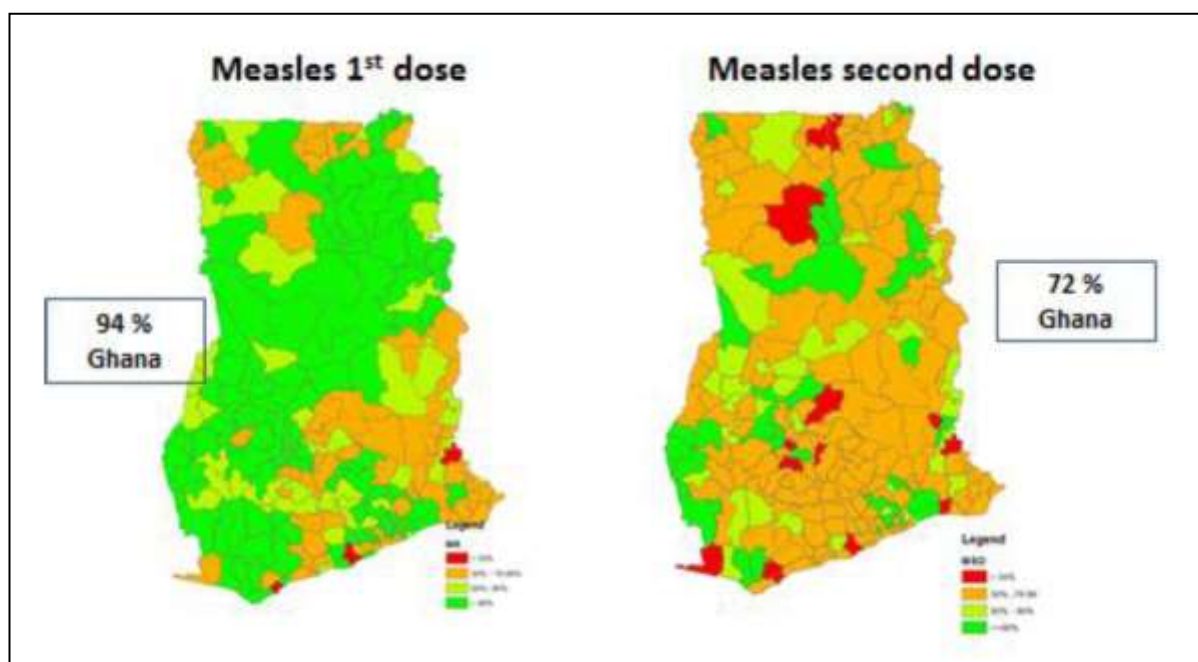
South Sudan JA 2016

Coverage



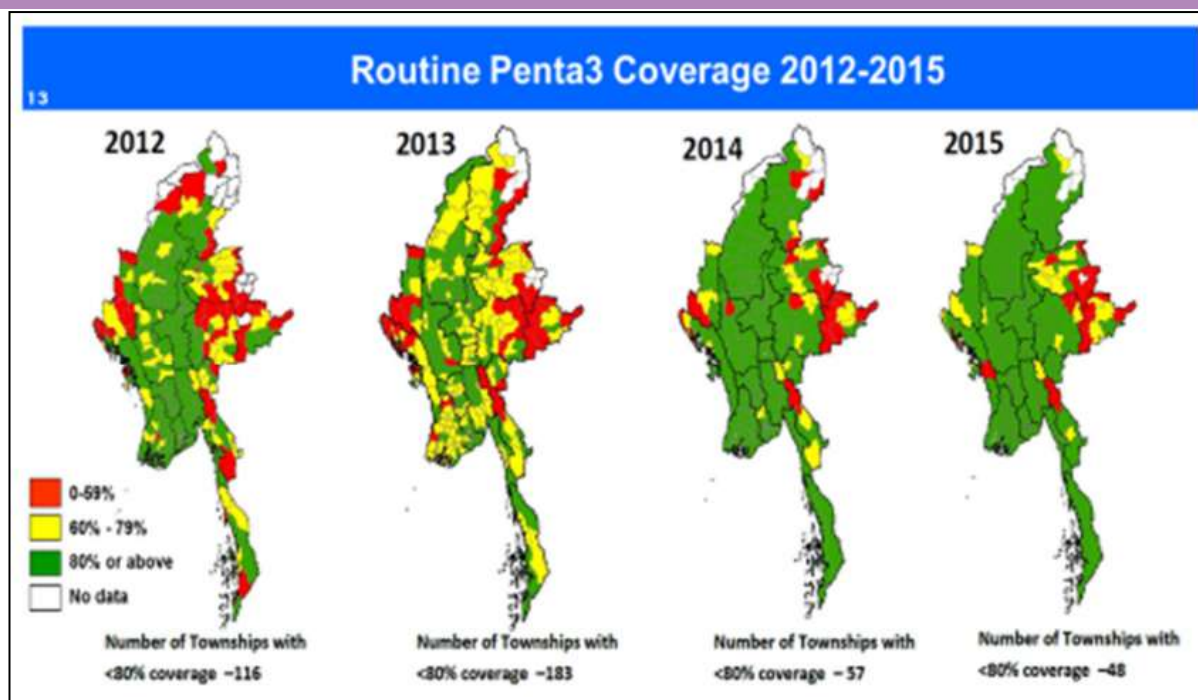
Yemen JA 2016

Districts ranking by DTP3 and MCV1 coverage



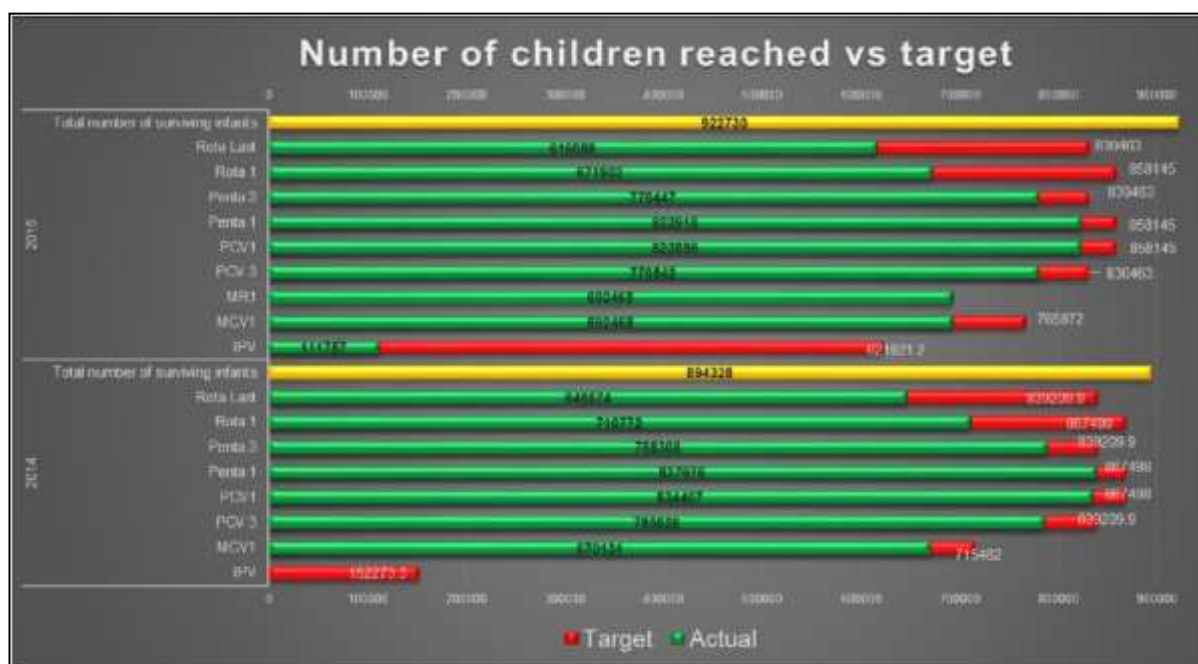
Ghana JA 2016

Coverage



Myanmar JA 2016

DTP3 unimmunized infants



Yemen JA 2016

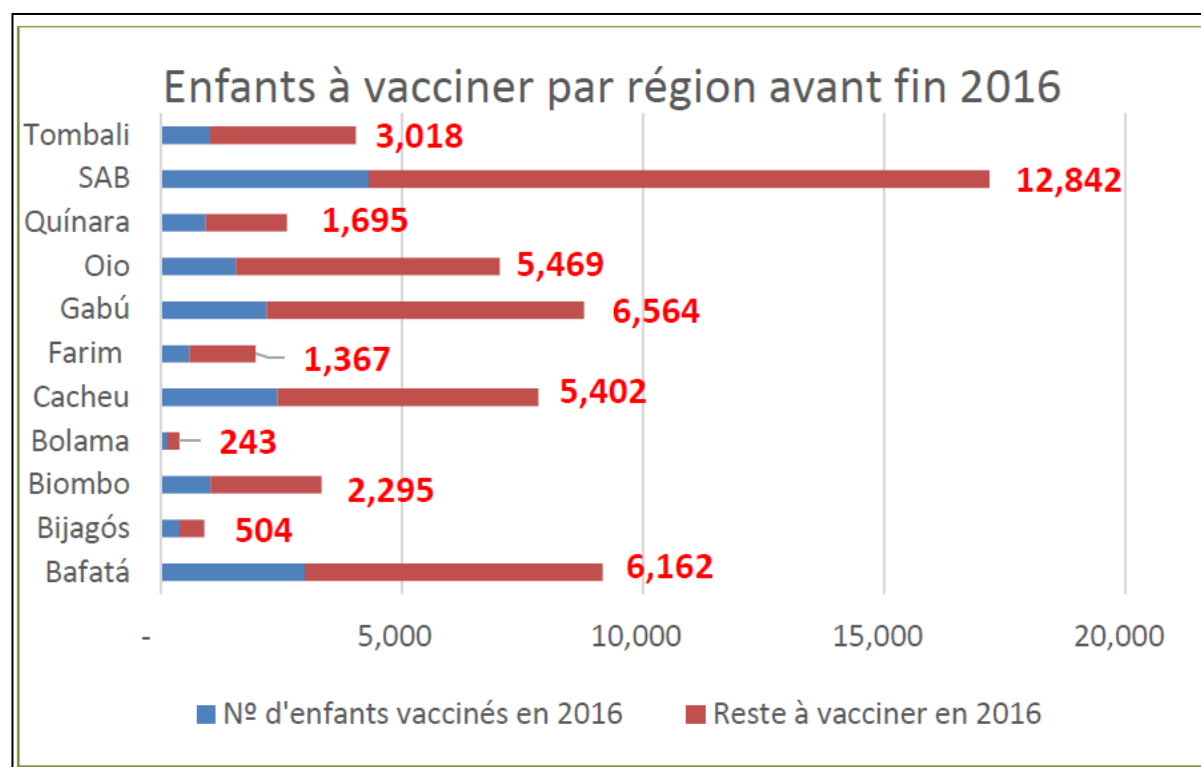
District ranking by DPT1 and DPT3 under/unvaccinated infants

Coverage

Annexe C : Nombre d'enfants à rattraper avant fin 2016

Régions	Cible annuelle	Cible semestrielle	Nº d'enfants vaccinés 1er semestre	Reste à vacciner le reste de l'année	% d'enfants à vacciner
Bafatá	9160	4 580	2 998	6 162	62,27%
Bijagós	907	453	403	504	50,56%
Biombo	3339	1 669	1 044	2 295	63,73%
Bolama	394	197	151	243	56,63%
Cacheu	7828	3 914	2 426	5 402	64,01%
Farim	1973	986	606	1 367	64,28%
Gabú	8775	4 388	2 211	6 564	69,80%
Oio	7033	3 517	1 564	5 469	72,76%
Quínara	2628	1 314	933	1 695	59,50%
SAB	17166	8 583	4 324	12 842	69,81%
Tombali	4049	2 025	1 031	3 018	69,54%
Total Pays	63252	31626	17 691	45 561	67,03%

Guinea-Bissau JA 2016



Guinea-Bissau JA 2016

Suggested Indicators / Analysis

Suggested Analyses

Inequality difference and/or ratio

Disaggregated per household economic status (quintile 5- quintile 1), mother's education (secondary school or higher-no education), place of residence (urban-rural), sex (male-female).

Additional analyses

Coverage trends in identified / suspected vulnerable groups (ethnic, religious, slums, refugees, internally displaced etc.). Other analyses available from a recent equity analysis.

Data Sources

Surveys

Guidance and Resources

State of inequality: childhood immunization, WHO (2016)

<http://apps.who.int/iris/bitstream/10665/252541/1/9789241511735-eng.pdf>

The guide to tailoring immunization programmes (TIP), WHO (2013)

http://www.euro.who.int/_data/assets/pdf_file/0003/187347/The-Guide-to-Tailoring-Immunization-Programmes-TIP.pdf?ua=1

Global routine immunisation strategies and practices (GRISP), WHO (2016)

http://apps.who.int/iris/bitstream/10665/204500/1/9789241510103_eng.pdf?ua=1

Examples

Inequality and/or Difference Ratio

Equity Analysis for Penta 3 for 2008 and 2014					
Percentage Of Children Age 12-23 Months Who Received Penta 3					
Background Characteristics	2014	2008	Background Characteristics	2014	2008
SEX			RESIDENCE		
Male	86.8	88.8	Urban	88.5	87.2
Female	90.3	88.8	Rural	88.5	89.8
EDUCATION			REGION		
No Education	86.7	84.5	Western	83.5	96
Primary	83.7	90.1	Central	89.5	81
Middle/JSS	90	91.8	Greater Accra	91.1	88.6
Secondary +	94.3	88.1	Volta	85.6	89.5
WEALTH QUINTILE			Eastern	89.8	91.5
Lowest	87.4	88	Ashanti	92.5	91.4
Second	86.3	86.5	Brong-Ahafo	88.2	95.7
Middle	87.8	82.1	Northern	80.7	75.1
Fourth	90.1	95.8	Upper East	93.3	95.8
Highest	91.7	93.3	Upper West	96.7	94.8
			TOTAL	88.5	88.8
SOURCE: 2008 and 2014 Ghana Demographic and Health Survey					

Ghana JA 2016

Surveillance of Vaccine Preventable Diseases

Suggested Indicators / Analysis

Suggested Analyses

Number of cases (suspected and confirmed)

Measles, Rubella, Congenital Rubella Syndrome (CRS), Pertussis, Polio. Consider use of maps / graphs to present data and comparison with coverage data. Consider disaggregating by age and vaccination status.

Outbreaks

Distribution (e.g.: across districts) and characteristics of cases of any VPD outbreak in the country, depending on local epidemiology (e.g. Meningitis, Yellow Fever, Japanese Encephalitis).

Additional analyses

- Number of other VPDs cases reported and confirmed per year
- Number of AEFI reported and confirmed per year. Consider disaggregation by severity.
- AEFI reporting ratio per 100,000 surviving infants per year

Data Sources

Administrative, Surveys, Surveillance Systems

Guidance and Resources

Immunization, vaccines and biologicals: immunization surveillance, assessment and monitoring, WHO (2016)

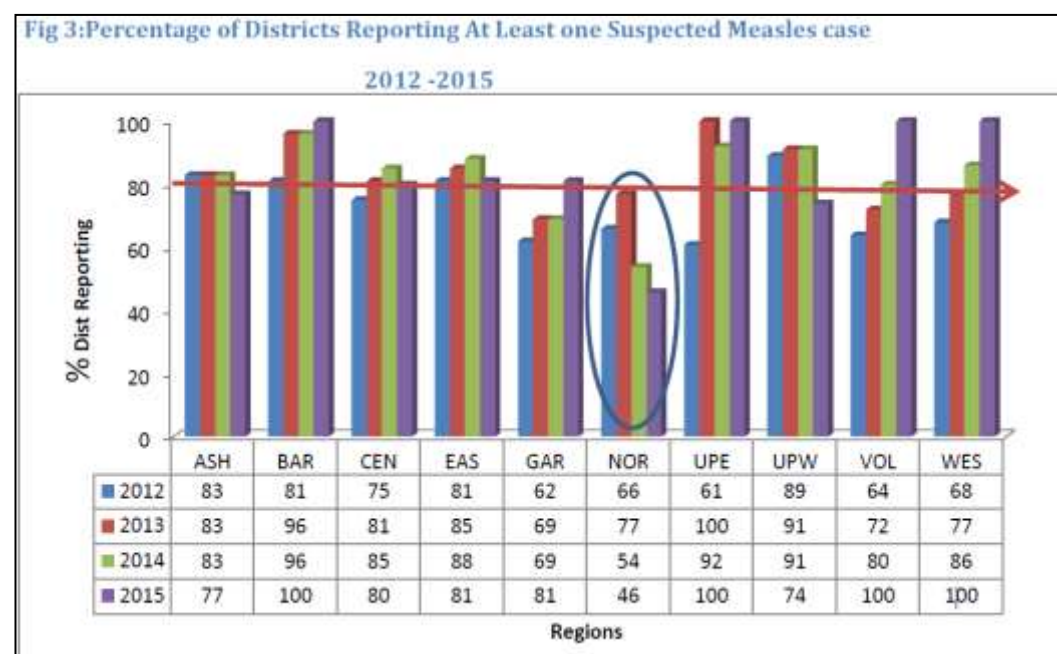
http://www.who.int/immunization/monitoring_surveillance/en/

Indicators for monitoring district and national performance, WHO

http://www.who.int/immunization/monitoring_surveillance/routine/indicators/core_set_national_district.pdf?ua=1

Examples

Number of cases (suspected and confirmed)



Ghana JA 2016

Health Systems

Suggested Indicators / Analysis

Suggested Analyses

Number of health facilities providing EPI services

Distribution and trends should also be considered. Disaggregation per district and province is highly desirable. The total population covered by health facilities should be considered if estimations of population per catchment area is available. Otherwise, average population covered per health facility on district/province level should be used.

Frequency of vaccination sessions provided

Compare planned versus actual if possible. Disaggregated by delivery model (fixed/outreach/mobile). Subnational disaggregation is highly recommended.

Number of cold chain equipment

Breakdown coverage of cold chain equipment per health facility if feasible and analysis of population with adequate cold chain equipment according to agreed standards. Suggested disaggregation on province/district level if possible.

Number of health workers

Disaggregation by cadres, highlighting those most commonly providing vaccination services. Disaggregation by province / district / health facility level if possible.

Additional analyses

Wastage rates, stock outs, frequency of cold chain maintenance, availability of transportation means

Data Sources

JRF, Administrative, Health Facility Assessments, Other assessments

Guidance and Resources

Indicators for monitoring district and national performance, WHO

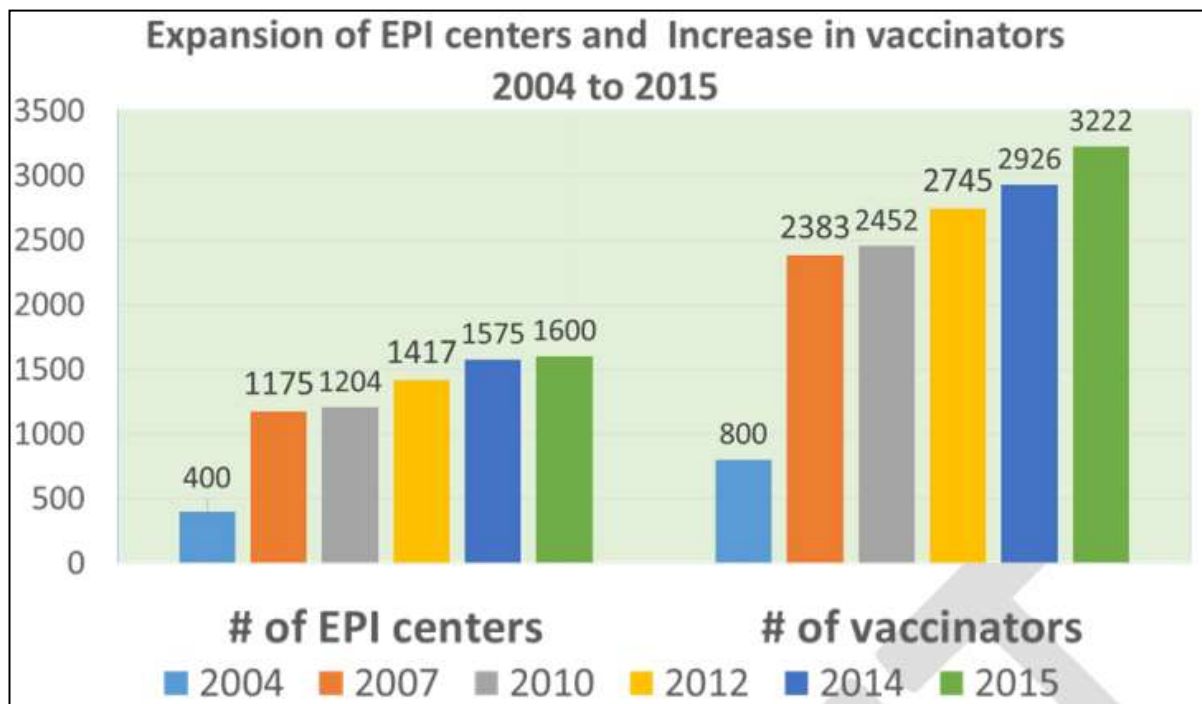
http://www.who.int/immunization/monitoring_surveillance/routine/indicators/core_set_national_district.pdf?ua=1

Immunization in practice: Monitoring and using your data., WHO

http://www.who.int/immunization/monitoring_surveillance/resources/IIP_Module7.pdf?ua=1

Examples

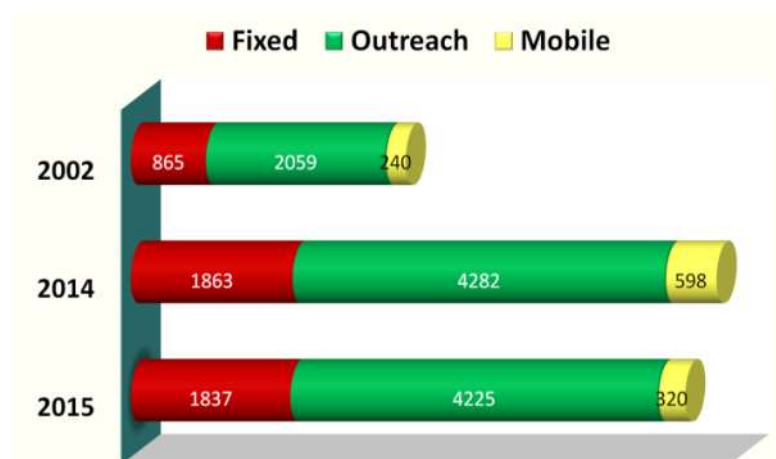
Number of immunization service delivery points



Afghanistan JA 2016

Frequency of vaccination services

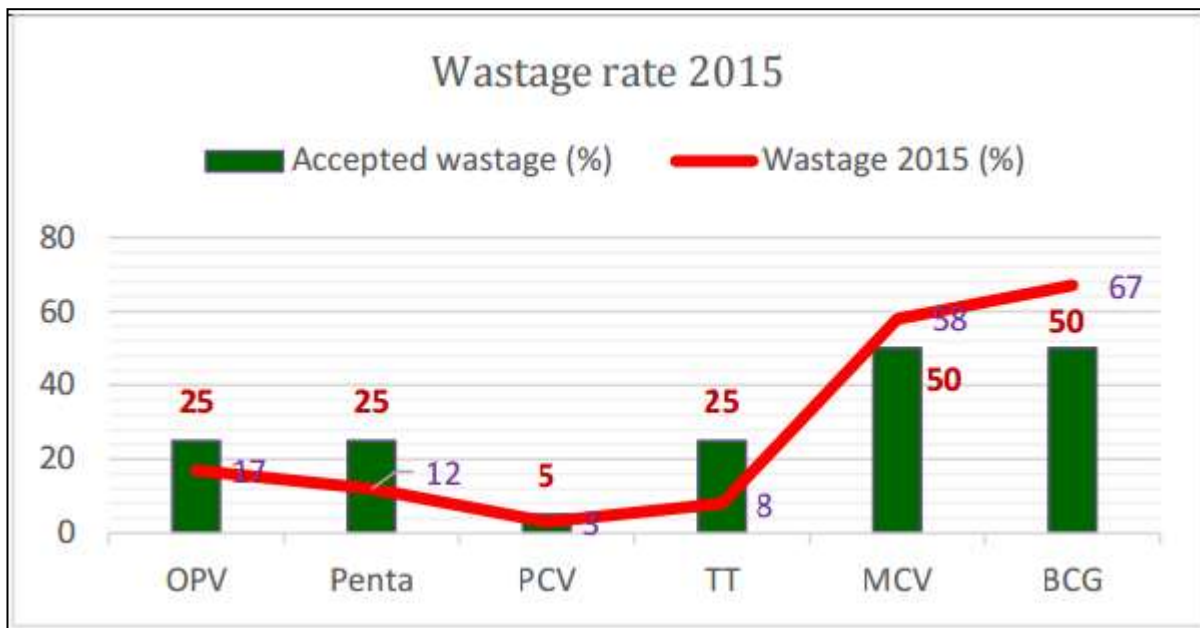
Figure 1: Trend of EPI service by strategy 2010-2015:



Sudan JA 2016

Health Systems

Additional Analyses



Afghanistan JA 2016

Demand

Suggested Indicators / Analysis

Suggested Analyses

Drop-out rates (DPT1-DPT3/DPT1-MCV1/MCV1-MCV2)¹

Trend analysis. Consider disaggregation at subnational level, with special attention to districts supported by GAVI HSS. Consider analysis if information is available for vulnerable groups.

Additional analyses

In the case of a recent Knowledge, Attitudes and Practice (KAP) survey, list the main reasons for non-vaccination and drop-out, as well as a quantitative and qualitative analysis for people not seeking immunisation.

Data Sources

JRF, Administrative, KAP Surveys, Surveys, Other assessments

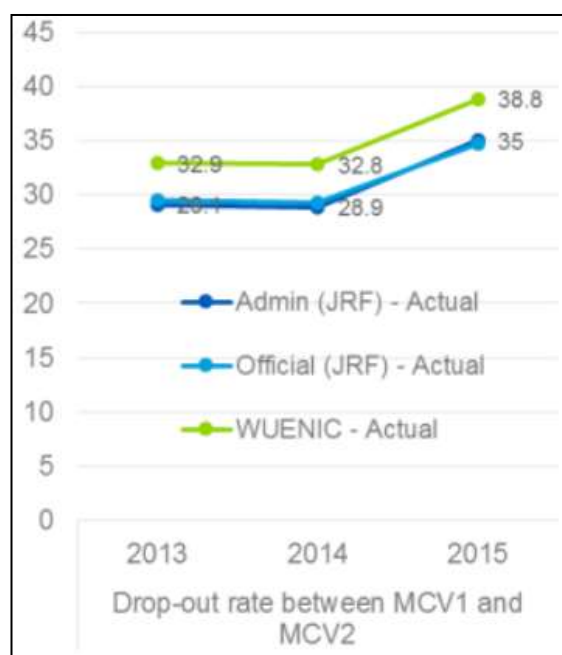
Guidance and Resources

Immunization in practice: Monitoring and using your data., WHO

http://www.who.int/immunization/monitoring_surveillance/resources/IIP_Module7.pdf?ua=1

Examples

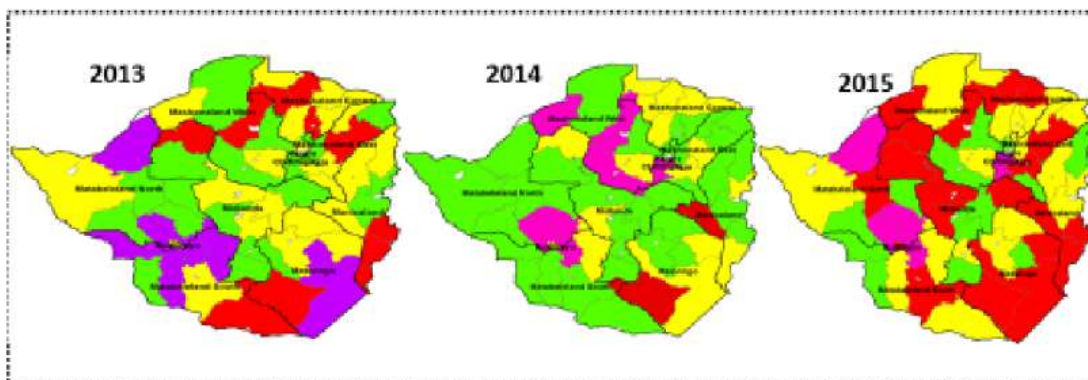
Drop-out rates



Yemen JA 2016

¹ Drop-out rates may be affected by different causes, which are not necessarily related to immunisation demand. Discussing reasons for drop-out including a service delivery perspective will be also relevant.

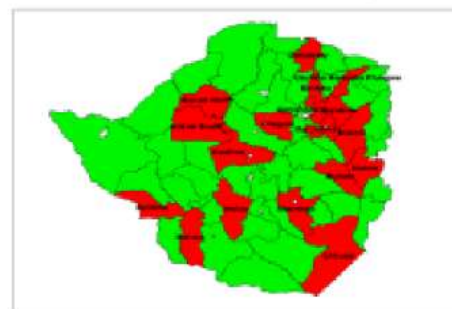
Penta 1 – 3 drop out rate 2013 – 2015 (source: admin coverage)



Key	2013	2014	2015
Negative	8(13%)	7(11%)	5(8%)
< 5%	19(30%)	35(55%)	14(22%)
5 to 10 %	25(40%)	19(30%)	21(33%)
> 10%	11(17%)	2(3%)	23(37%)

Districts by Penta 3 coverage 2015

Source: JRF : red < 80% coverage



Data Quality

Suggested Indicators / Analysis

Suggested Analyses

Completeness of reporting

Suggested analysis on district level and facility level, if possible.

Timeliness of reporting

Suggested analysis on district level and facility level, if possible.

Additional analyses

Internal consistency (outliers, comparison with previous periods, negative dropouts), accuracy based on desk reviews. Trend analysis should be considered. External consistency based on survey data. Consider geographical disaggregation. Consistency of denominators. Consider trend analysis if possible. Sub-national disaggregation is highly desirable.

Data Sources

JRF, Administrative, KAP Surveys, Surveys, Other assessments

Guidance and Resources

Immunization in practice: Monitoring and using your data, WHO

http://www.who.int/immunization/monitoring_surveillance/resources/IIP_Module7.pdf?ua=1

Indicators for monitoring district and national performance, WHO

http://www.who.int/immunization/monitoring_surveillance/routine/indicators/core_set_national_district.pdf?ua=1

Data Quality Review, WHO

http://www.who.int/healthinfo/topics_standards_tools_data_quality_analysis/en/

Assessing and improving the accuracy of target population estimates for immunization coverage, WHO

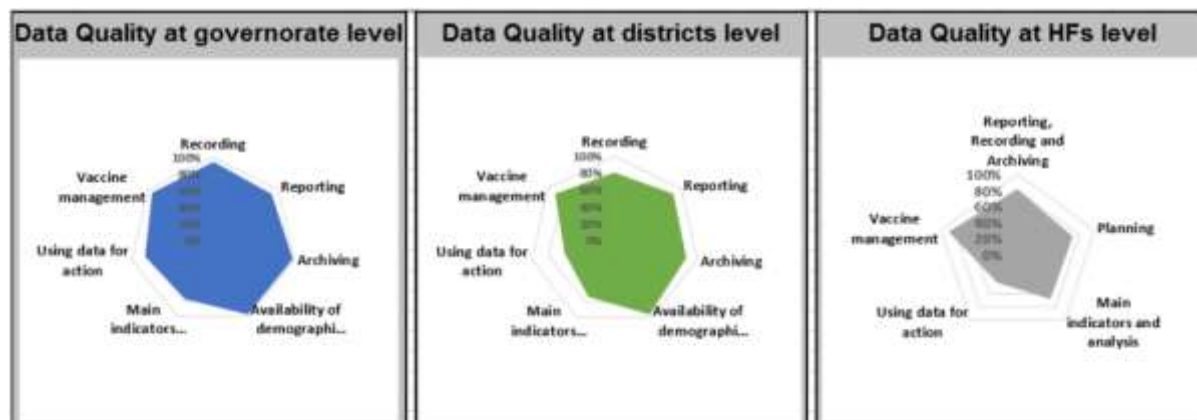
http://www.who.int/immunization/monitoring_surveillance/data/Denominator_guide.pdf?ua=1

Immunization eLearning courses - immunization coverage data, WHO

<http://www.who.int/immunization/documents/training/en/>

Examples

Completeness of reporting



Yemen JA 2016

Glossary of terms

AEFI	Adverse Event Following Immunisation
AHS	Annual Health Survey
CRS	Congenital Rubella Syndrome
DTP	Diphtheria Pertussis Tetanus Containing Vaccine
ECS	EPI cluster survey
EPI	Expanded Programme on Immunisation
GAVI	The Global Alliance for Vaccination and Immunisation
HF	Health Facility
HSS	Health System Strengthening
JA	Joint Appraisal
JRF	Joint Report Form
KAP	Knowledge Attitudes and Practices
MCV	Measles Containing Vaccine
MICS	Multiple Indicator Cluster Survey
NRVA	National Risk and Vulnerability Assessment
OPV	Oral Polio Vaccine
PCV	Pneumococcus Vaccine
Penta	Pentavalent Vaccine
UNICEF	United Nations International Children's Fund
VPD	Vaccine Preventable Disease
WHO	World Health Organisation
WUENIC	WHO/UNICEF Estimates of National Immunization Coverage
YF	Yellow Fever